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RESEARCH REPORT

JOINT AIRBORNE/AIR TRANSPORTABILITY TRAINING

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1989

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UNITED STATES AIR FORCE
MAXWELL AIR FORCE BASE, ALABAMA

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AIR WAR COLLEGE AIR UNIVERSITY

JOINT AIRBORNE/AIR TRANSPORTABILITY TRAINING

by

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A Defense Analytical Study Submitted to the Faculty in Fulfillment of the Curriculum Requirement

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MAXWELL AIR FORCE BASE, ALABAMA

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EXECUTIVE SUMMARY

TITLE: JOINT AIRBORNE/AIR TRANSPORTABILITY TRAINING

AUTHOR: Richard A. Cole, Lieutenant Colonel, USAF

> Historical development of Joint Airborne/Air Transportability Training (JA/ATT) during World War II is carried through the program's consolidation under the Military Airlift Command. This provides a foundation for an examination of the present day JA/ATT mission concept and explanation of how the program is managed. This presentation focuses on the interworkings of the airlift system which influence service participation in JA/ATT. A discussion of the major problem areas follows, keying on budgetary pressures, competing airlift demands and equalizing training accomplishment. The study concludes with a number of recommendations on how to enhance the JA/ATT program within exist-

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BIOGRAPHICAL SKETCH

Lieutenant Colonel Richard A. Cole possesses a wide and varied background in military airlift. He has operational experience in all of the Military Airlift Command's (MAC) primary aircraft (C-130, C-141, and C-5) and has served as a Tactical Airlift Liaison Officer with the 101st Airborne Division. As a wing combat operations staff officer, he managed the organization's Affiliation and JA/ATT Programs providing air mobility training to Army, Navy, Marine, and Air Force unit's throughout the eastern United States. He has had tours of duty on both the MAC and Air Staffs. In the latter capacity, he was the Airlift Branch Chief in the Directorate of Operations from 1985-1988. During his tenure at the Pentagon, Colonel Cole worked many sensitive JA/ATT issues with MAC, the JCS, and the other services. He graduated from Squadron Officers School in 1975 and the Navy Command and Staff College in 1984. Lt Col Cole is a graduate of the Air War College, class of 1989.

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CHAPTER I

INTRODUCTION

Joint Airborne/Air Transportability Training (JA/ATT) is a Joint Chiefs of Staff (JCS) sponsored program that is managed by the Military Airlift Command (MAC). This Air Force funded program provides combat readiness training for MAC aircrews and airlift users in a realistic joint environment. All of the military services are active in the program through their involvement in either airland or airdrop operations. While users become familiar with airlift methods and procedures, aircrews gain an understanding of user's needs and employment techniques.

Joint training of flying organizations and air mobile units had its genesis in the Army Air Force during World War II. With the establishment of a separate Air Force in the post war years, such training initially became the domain of the Tactical Air Command (TAC) before being transferred to the airlift forces in the late fifties. Today MAC closely interfaces with the other services to maximize the accomplishment of both aircrew and user training requirements in its management of this multi-million dollar program. Despite these efforts, the viability of the JA/ATT program

has been severely tested by a number of fiscal challenges over the past few years.

Although a number of initiatives have been instituted to stabilize JA/ATT, it may be time to restructure the program. Alternatives may call for refunding the flying hours or transferring management to the JCS. Other possible avenues may require limiting air transportability training to loading simulators and shifting more joint training into the unilateral training arena. Regardless of what management principles are employed, JA/ATT or a new program with similar goals must have the continued support of all service components for it provides quality training at minimal cost.

CHAPTER II

HISTORICAL PERSPECTIVE

The evolution of joint training between air and ground forces was initiated with the first deployment of hot air observation balloons. Although this process has been constant since that time, it was greatly accelerated during World War II with the increased capability of more modern aircraft designs. This was particularly true in the area of troop carrier and airborne training operations as the allies prepared for the invasion of Europe. The IX Troop Carrier Command, for example, was involved in intensive joint airdrop training throughout 1943 in rehearsal after rehearsal for the Normandy invasion. Such training included the employment of both glider and parachute tactics and ranged from battalion combat teams through division size exercises.

While airdrop training may have received more of the headlines, development of sound airland doctrine was probably of more importance to the total war effort. To maximize the capability of the airline type transports of the day, Air Cargo Resupply Squadrons were activated. These units were colocated with air mobile units to provide liaison between air operators and ground operators and were the precursors to today's aerial ports. Their functions included setting up

flights, dispatching planes, shipping and packing, rigging and loading aircraft.⁴ (Unfortunately, this expertise was lost as the Air Cargo Resupply Squadrons were deactivated at war's end.⁵)

In the immediate post war period, demobilization overwhelmed almost all joint training. This lull was further perpetuated as roles and missions were sorted out following the establishment of a separate air service in 1947.

Although the Army and Navy Air Transport Services were consolidated under the Air Force's Military Air Transport Service (MATS), the airlift function remained divided within the Air Force.⁶ MATS assumed responsibility for:

Although MATS was to maintain liaison with all agencies that utilized transport type aircraft, the development of training and operational procedures for the air transportation of troops and cargo in the tactical arena fell to TAC. 8 In essence, MATS was to conduct noncombat, overseas, or inter-

theater operations while TAC was charged with carrying out intratheater, combat operations. 9

in the post war period, Exercise Swarmer, was held in the spring of 1950. 10 Although the exercise was deemed a success—aren't they all—the five year hiatus in meaningful joint training had taken its toll. 11 It was clear that Army personnel had not received adequate air transportability training and in many cases this was their first experience with real aircraft. 12 Upon further examination, wide discrepancies were noted between Army and Air Force doctrine and regulations and a major after action report discrepancy was the nonstandardized air transportability training in the Army and Air Force. 13

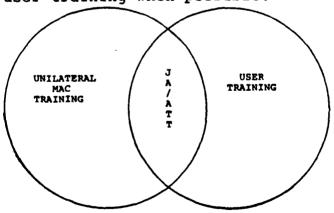
As a result of the findings in Exercise Swarmer, TAC incorporated Joint Troop Carrier-Army Training into its training program syllabus. 14 The directive called for qualified Air Force and Army instructors to acquaint aircrews with Army organization and equipment, and to indoctrinate Army units in all aspects of air transport. 15 In addition, as many flying hours as possible were to be devoted to joint training to refine joint paratroop and air transportability skills. 16

When the intertheater capable C-124 Globemaster was transferred from TAC into the airlift forces in 1957, MATS began to participate in the JA/ATT program. 17 Initially MATS augmented TAC with 1100 C-124 flying hours per month to support the training of airborne units and in 1961, was authorized to conduct air transportability training with non-airborne units. 18 In 1962, MATS expanded its role in the program to include Marine Corps elements and began to affiliate airlift wings with the air mobile units in the other services. 19 With more and more tactical airlift capability coming into the newly renamed MAC in the late sixties, the responsibility for managing JA/ATT gradually shifted from TAC to MAC where program management was consolidated in the early seventies.

CHAPTER III

MISSION CONCEPT

While airlift provides the capability to deliver forces where they are needed, joint readiness insures that they will be delivered there in a timely manner. JA/ATT helps provide that interservice readiness through the simultaneous accomplishment of common training requirements in a joint environment. While aircrews can successfully complete a training mission by dropping a training bundle which simulates the release of a paratrooper, the quality of the training would be much enhanced with a real paratrooper jumping from the aircraft. Conversely, the jumper's training would be much more realistic than a comparable jump from an Army helicopter. The concept behind JA/ATT is to merge operator and user training when possible.

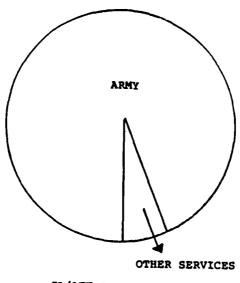


ENHANCES INTERSERVICE READINESS $(Figure 1^{20})$

Mission responsibility for the JA/ATT program is spelled out in DOD 4515.13-R, Air Transportability Eligibility. Stated purpose is "to ensure that the combat readiness of forces assigned to unified commanders is maintained" and that ". . . airlift must be integral to mission concept and objectives." These missions include:

- Airdrops within a unified commander's area of responsibility.
- Assault airland training within a supported commander's area of responsibility.
- Static load training for units with an air transportability mission.
- Joint development and certification of new equipment or procedures.
- 5. Combat support training (flare drop, radio relay, etc.).
- 6. Airland operations in conjunction with emergency deployment exercises for those units specifically tasked to perform an air transportable mission.
- 7. Basic airborne jump qualification.²³
 The regulation strictly prohibits the conduct of unilateral training or point to point airlift under the guise of JA/ATT.²⁴

While all services participate in the program, the Army is by far the largest user of JA/ATT utilizing 85 percent of the available flying hours. Their JA/ATT activities



JA/ATT PARTICIPATION

(Figure 2²⁵)

take in almost every facet of the program and provide the Air Force with its best source of live airdrops. Marine Corps participation centers more on combat airland assault missions which frequently transit short, unimproved runways and incorporate engine running on/off load procedures. 26 Air Force participation as a JA/ATT user is predominantly accomplished with TAC through static loading training exercises.

JA/ATT missions can vary greatly in scope and complexity. Operations can be as simple as a single aircraft static loading to a full blown major exercise. An example of the latter was a 1986 exercise called Market Square. 27 Hosted by the 82nd Airborne Division, this was the largest JA/ATT operation ever accomplished with 418 airlift missions flown. 28 In all the following numbers and types of aircraft participated: 29

# Aircraft	Type Aircraft
26	C-130
16	C-141
2	C-5
1	KC-10
}	

More troops and cargo were airdropped or airlanded than on any previous JA/ATT exercise. 30

It is not surprising that the primary tactical airlifter, the C-130 Hercules, flies the greatest share of

JA/ATT hours. Approximately two-thirds of the annual JA/ATT

program is conducted by C-130 aircrews. Although the C-141

Starlifter responds to many airdrop taskings, operations

involving the Low Altitude Parachute Extraction System

(LFPES) or transiting short airfields remain the exclusive

domain of the C-130. (Additional explanation for the pre-

ponderance of C-130 hours in the JA/ATT program will be presented in Chapter IV, Program Management.) A typical stateside C-130 wing will fly nearly 500 JA/ATT missions in a year logging over 7,000 hours. 31 This contrasts significantly to the C-5 Galaxy's participation in the program where the entire C-5 fleet has historically flown less than 500 hours per year. 32 Although the C-5 mission is being expanded from its current airland role, C-5 JA/ATT consists primarily of static load training.

	JA/ATT	FLYING HOUR	s FLOWN33	
FISCAL YEAR	<u>C-130</u>	<u>C-141</u>	<u>C-5</u>	TOTAL
77	29,489	10,776	445	40,720
78	26,882	8,413	482	35,384
79	29,959	9,562	415	39,936
80	25,311	9,973	512	35,796
81	28,455	11,278	499	40,232
82	26,747	12,557	348	39,652
83	25,454	12,185	483	38,122
84	22,429	11,866	626	34,921
85	29,123	14,982	1589	45,694
86	24,660	11,635	1187	37,482
87	20,833	12,241	1069	34,143
88	17,417	7,808	464	25,689

(Figure 3)

CHAPTER IV

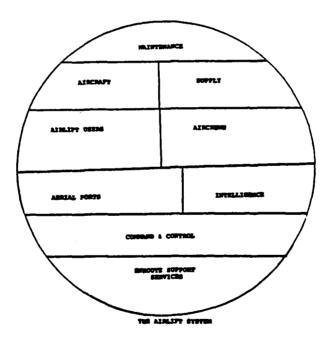
PROGRAM MANAGEMENT

The JA/ATT program is only a small sub-element of the airlift system. To better understand how JA/ATT is managed, it may prove helpful to briefly familiarize the reader with the major elements of that system. Since aircrew training requirements drive the entire system, I will detail a weapon system by weapon system breakout of the recurring aircrew training events. I will then review the remaining airlift flying hour categories to include funding parameters and established missions priorities. Having established a basic understanding of the system, I will finally explain the intricacies of managing the JA/ATT program.

The Airlift System

In its day to day peacetime operations, MAC exercises a worldwide airlift system to maintain its readiness posture in case of war. This system is composed of operators, maintainers, communicators, transporters, suppliers and airlift users, as well as the facilities and equipment which supports them. Each of these elements requires a certain level of airlift activity—flying hours—to hone war—time skills. Maintenance personnel, for example, need a

certain degree of hands-on training to gain and maintain their knowledge of aircraft servicing. Suppliers depend on flying hours to justify their stockage of spare parts while aerial port personnel need some level of cargo and passenger throughput to maintain their traffic processing skills.³⁴ The most demanding requirement, however, is driven by aircrew readiness. Generally speaking, if aircrew training requirements are met, the readiness demands of the other elements in the system are satisfied.



(Figure 4^{35})

Aircrew Training Program

MAC's aircrew training program is structured around the following:

- Event-centered requirements or minimum training required to maintain currency.
- 2. Balancing the pilot force so that 50 percent are aircraft commander qualified. 36

It is in the former area, event-centered requirements, that this discussion will focus. (For the sake of this study, only basic tactical aircrew requirements will be addressed.)

In addition to their basic flying training requirements of takeoffs, approaches, and landings, C-130 aircrews have a myriad of tactical events to accomplish. MAC's Directorate of Training applies a standard time to complete each such event which are then summed and multiplied by the total number of pilots to achieve a baseline proficiency flying hour requirement for the C-130 fleet. (Although all aircrew positions have recurring flying requirements, the pilots drive the level of flying in each of the weapon systems since they have the most events to accomplish.) This synopsis of the C-130 semiannual tactical events was taken from MAC Regulation 51-130, C-130 Aircrew Training.³⁷

		FACTICAL A			
SEMIAN	PILOT	YING REQUI	NAVI- GATOR	FLT ENGI- NEER	LOAD MASTER
TRAINING SORTIE	1	1	1	1	
ASSAULT LANDINGS: TOTAL NIGHT HEAVYWEIGHT TOTAL	18 9 6	6 3 			
HEAVYWEIGHT NIGHT	3				
ASSAULT TAKEOFFS: TOTAL NIGHT	12 6	6 3			
AIRDROPS: TOTAL NIGHT TYPES:	8	8 3	8 3		
Actual Equipment Actual Container Delivery System	1	1	1		1
(CDS) Actual CDS Night Actual Personnel	2 1 1	2 1 1	2 1 1	 	2 1
LOW LEVEL ROUTES: TOTAL DAY NIGHT UNFAMILIAR DAY UNFAMILIAR NIGHT RADAR	6 2 2 2 1	6 2 2 2 1	6 2 2 2 1 1	 	
FORMATION RECOVERIES	8	8			

(Figure 5)

The C-141 tactical aircrews must accomplish many of the events that are required of C-130 crewmembers. The

most noticeable differences, however, are that C-141 crews do not have to accomplish assault landings nor are they required to complete as many repetitions of each of the events. MAC Regulation 51-141, C-141 Aircrew Training, was the source for the C-141 tactical training requirements summary. 38

BASIC C-141 TACTICAL AIRCREW SEMIANNUAL FLYING REQUIREMENTS					
	PILOT	COPILOT	NAVI- GATOR	FLT ENGI- NEER	LOAD MASTER
TRAINING SORTIE	1	1	1		1
DEPARTURES: VISUAL STATION KEEPING	2 2			<u></u>	
AIRDROPS: TOTAL DAY NIGHT STATION KEEPING	8 2 1 3	6 1	8 2 1 3	 	6
TYPES: Equipment Container Personnel	1 1	1 -1	1 1	 1	2 2 2
LOW LEVEL ROUTES: TOTAL STATION KEEPING VISUAL UNFAMILIAR	8 3 3 2	6 1 1 2	8 3 3 2	 	
FORMATION RECOVERIES TOTAL VISUAL STATION KEEPING	4 1 2	 	- - 2		

(Figure 6)

Although C-5 aircrews do not have tactical airdrop requirements, a summary of their overall recurring events was included for the sake of comparison.³⁹

BASIC C-5 TACTICAL AIRCREW SEMIANNUAL FLYING REQUIREMENTS					
	PILOT	COPILOT	NAVI- GATOR	FLT ENGI- NEER	LOAD MASTER
PROFICIENCY SORTIES	2	6			
TAKEOFFS	12	12			
DEPARTURE MONITOR			8		
APPROACHES	20	20		***	
APPROACH MONITOR		~-	8		
LANDINGS TOTAL NIGHT	12 2	12 2		 	

(Figure 7)

MAC Flying Hour Program

while MAC trains its aircrews and insures the readiness of its worldwide transportation system, an airlift by-product is produced which is employed to satisfy the air transportation needs of all the military services. 40 As MAC defines its training requirements and translates them into flying hours, the military users of airlift begin to

forecast their air transportation requirements.⁴¹ These user requirements fall into the following categories:⁴²

- 1. Exercise. Refers to participation in JCS exercises. These high priority requirements are funded through the JCS Operations and Maintenance account.
- 2. Special Assignment Airlift Missions (SAAM).

 Describes missions which have special pickup and/or delivery requirements at locations that are not normally serviced by MAC. This "special delivery" service is paid by user transportation dollars.
- 3. Channel. Represents missions which transit MAC's established worldwide network of air routes. Users of this service reimburse MAC according to the number of passengers carried or pounds of cargo transported.
- 4. JA/ATT. As previously mentioned, MAC's Operations and Maintenance account pays for this category of missions.

All of these user requirements are passed to MAC to see if they can be accommodated in MAC's by-product airlift capacity. By simultaneously satisfying MAC's readiness training and DOD transportation needs, the US government saves one billion dollars each year. 43 The management tool that MAC uses to allocate their airlift services is called the Airlift Services Industrial Fund (ASIF). 44 This fund

pays for MAC's operating costs (except for MAC's unilateral training expenses and JA/ATT) incurred in providing airlift to its customers who, in turn, reimburse the fund with their transportation dollars. In essence, 64 percent of MAC's flying hour budget is given to the military transportation managers to exercise the MAC system. MAC is, therefore, keenly interested in selling its airlift by-product to maintain its readiness posture.

In this flying hour allocation process, MAC first satisfies its own unilateral training needs which cannot be accomplished on other missions.⁴⁷ Hours are next apportioned to JA/ATT and exercises with the remaining hours being distributed to meet channel and SAAM requirements.⁴⁸ While this is the established mission priority basis during the planning process, we will find that another set of priorities is employed during the actual execution of the program.

How large a role each mission category plays in the various flying hour programs varies significantly among the airplane types. Unilateral training represents approximately 43 percent of the C-130 flying hours but accounts for only 15 percent in the C-141 and 22 percent in the C-5.49 Exercises, on the other hand, make up only 4 percent of the C-5 program but compose 10 percent of the C-130 and 15 percent of the C-141 programs.50 JA/ATT plays a big role in

the C-130 effort composing nearly 17 percent of the total hours. 51 JA/ATT hours amount to only 5 percent of the C-141 program and a miniscule 1 percent in the C-5.52 Channel hours amount to almost two-thirds of the C-5 program, half of the C-141 program and only 17 percent of the C-130 program. 53

MISSION CATEGORY ANALYSIS (ACTUAL HOURS FLOWN IN 1988)				
CATEGORY	<u>C-130</u> AIR	CRAFT TYPE C-141	<u>C-5</u>	
UNILATERAL TRAINING	40,635	44,392	10,368	
EXERCISES	12,016	33,087	4,640	
SAAM	29,805	49,225	12,632	
CHANNEL	25,872	105,818	17,399	
JA/ATT	17,417	7,808	464	

(Figure 8)

JA/ATT Management

MAC Operation Order (OPORD) 17-76, Joint Airborne/
Air Transportability Training, governs the management of the program. As discussed in the previous section, the Department of Defense allocates money to the MAC Operations and Maintenance account which is drawn upon to reimburse the ASIF for JA/ATT. The amount of money allocated to MAC to conduct JA/ATT is predicated on past JA/ATT utilization and

user forecasts of JA/ATT requirements. Historically, JA/ATT users have requested twice as many JA/ATT missions as MAC can support at the DOD funding level.⁵⁴

Operational units throughout the military funnel their requests for JA/ATT into their respective service's JA/ATT validator. ⁵⁵ Forces Command, for example, serves as the validator for all stateside Army organizations. ⁵⁶ (The overseas unified commands manage their respective JA/ATT programs as a function of organic theater airlift operations. ⁵⁷) Marine and Navy liaison officers are assigned to Headquarters MAC to manage their respective service's JA/ATT programs. ⁵⁸ For planning purposes, requests are categorized into the following areas:

- Routine--Consists of 1 to 6 C-130, C-141, or C-5 missions per day.
- Significant--Consists of 7 to 30 C-130, C-141,
 or C-5 missions per day.
- 3. Large Scale--Consists of over 30 missions per day and are executed in conjunction with JCS exercises.⁵⁹

Validated requests are presented at a monthly JA/ATT workshop which is attended by representatives from Head-quarters MAC, MAC numbered Air Forces, and operational wings, as well as the Air Force Reserve, Air National Guard, and

user organization representatives.⁶⁰ Particulars of each proposed mission (number of airframes needed per day, user training events to be completed, aircrew training events to be completed, etc.) are put on a large "mission" board. Each mission is evaluated by representatives from MAC and the services for maximum training accomplishment and rank ordered. These training rich missions are then applied to the available airframes that MAC has allocated for JA/ATT. During this process, it is often necessary for MAC to negotiate with the various JA/ATT requesting agencies to accommodate prospective missions into the available airframe schedule, i.e., slip a mission from one day to another, consolidate loads, etc.

above, a training quantification system was initiated in 1986.⁶¹ The system established a point value for the various aircrew tactical events listed in Figures 5-7 earlier in this chapter. The intent of this initiative was to improve the overall quality of JA/ATT by establishing a 1.0 point per flying hour minimum level to qualify for consideration as a JA/ATT mission.⁶² As a result of this system, both the quantity and quality of aircrew and user training was enhanced (see Figure 9 for point values⁶³) with MAC accomplishing

airdrops on 98 percent of the C-130 and 95 percent of the C-141 JA/ATT missions. 64

TACTICAL EVENT POINT VALUES					
TACTICAL EVENT	POINT VALUE				
PERSONNEL AIRDROP STATIC LINE					
C-130 (6 to 40 jumpers) C-141 (6 to 80 jumpers) MASS	1.0				
C-130 (40 or more jumpers) C-141 (80 or more jumpers)	3.0 3.0				
EQUIPMENT AIRDROP HEAVY					
Single Platform Sequential Platforms CONTAINER DELIVERY	1.0				
1-3 Bundles 4-7 Bundles 8-16 Bundles LOW ALTITUDE PARACHUTE EXTRACTION	1.0 1.5 3.0 3.0				
AIR REFUELING	2.0				
ENGINE RUNNING ON/OFFLOAD	1.0				
ASSAULT LANDING	1.0				
FORMATION AIRDROPS C-130/C-141 (3 TO 4 aircraft) C-130/C-141 (5 aircraft or more)	0.5 1.0				
NIGHT AIRDROPS	0.5				
UNFAMILIAR TACTICAL ROUTES OR DROP ZONES	1.0				

(Figure 9)

As mentioned earlier, both the Air Force Reserve and the Air National Guard send representatives to the JA/ATT workshop. The Air Reserve Component provides approximately 11,000 C-130 hours, 250 C-141 hours, and 600 C-5 hours as additive capability to MAC's organic JA/ATT program. As users identify their mission requirements at the workshop, Air Reserve Component representatives select those missions which fill their aircrew training needs. In addition to Reserve and Guard contributions, Strategic Air Command contributes approximately 20 KC-10 missions to the JA/ATT program every month. These missions provide air transportability training for JA/ATT users and air refueling training for MAC aircrews.

When MAC has satisfactorily filled its JA/ATT flying hour allocation, the Command's Mission Management Division publishes the Operations Tasking Order to CINCMAC OPORD 17-76. This is the monthly JA/ATT mission schedule that tasks specific MAC wings with specific JA/ATT missions. It is distributed 30 days prior to the actual operating month and any subsequent changes are worked through MAC and the appropriate numbered air force. 67

CHAPTER V

PROBLEM AREAS

Interservice friction is not new to JA/ATT. This
1948 excerpt reflects some of the problems facing the early
USAF in its dealings with the Army.

It is felt that cooperation between personnel of Lawson AFB and the Airborne Section of the Infantry School is superior. However, quite often these relations are strained due to the fact that the higher command of Lawson AFB call upon our aircraft to carry out Air Force missions. These Air Force missions invariably create a problem in that it upsets the Airborne Training schedule. The answer to this problem will have to be arranged and solved at higher command levels. The ideal arrangement for the Airborne Section would be one where a number of aircraft and personnel were given the primary mission of supporting the Airborne training and one in which such aircraft and personnel could not be interfered with, unless of course, a grave national situation existed. 68

Similar problems have continued to haunt the JA/ATT program through the years as "higher commands" are themselves forced to respond to budgetary pressures and the demands of the rest of the defense establishments. In addition, there has been an on going problem of balancing the training so that supported and supporting personnel receive meaningful training.

Budget Pressures

Just as interservice friction is not new to joint training, cuts in defense budgets have periodically occurred

throughout the years and forced adjustments in almost every military program including JA/ATT. Noteworthy examples were experienced in 1970 and more recently in 1988. In the former example, JA/ATT funding was reduced 32 percent forcing MAC and the supported agencies to reevaluate their JA/ATT requirements.⁶⁹ In a coordinated effort, lower priority missions were canceled while others were combined to reduce the total airframe requirement. Although the program remained viable, overall training was nonetheless reduced as some of the Army's airborne units were forced to cancel several field training exercises.⁷⁰

The 1988 incident appeared initially to have far more serious consequences. Due to Congressionally mandated reductions in the Air Force Operations and Maintenance programs in early 1988, MAC was faced with the prospect of curtailing all JA/ATT for the remainder of the fiscal year. This was a particularly sensitive situation since JA/ATT had already been reduced by 37 percent over the period of fiscal years 1986-1987. MAC estimated that it would need \$16.8 million to restore JA/ATT to minimal levels sufficient to insure the readiness posture (C-Status) of its own flying organizations as well as the air transport dependent units of the other services. 72

As the predominant user of JA/ATT, the Army was critically affected by these cuts. While airborne units would be minimally disturbed by the reductions in C-5 hours, the cuts to the C-141 and C-130 programs were intolerable. Since 20 to 25 percent of the Army's monthly JA/ATT allocation is dedicated to supporting Army schools, basic airborne as well as advanced Ranger and Pathfinder training would be severely degraded. To alleviate this situation, MAC sought funding for the \$16.8 million JA/ATT shortfall from the JCS exercise airlift program. Unfortunately, this avenue did not prove fruitful since JA/ATT does not fall within the exercise funding parameters and all available exercise funds were already obligated to the theater CINCs. This plea, however did generate sufficient JCS interest to highlight the issue to the services where alternative funding was found. To

Both of these examples demonstrate how vulnerable the JA/ATT program is to fluctuations in funding levels. Even during times of relatively stable budgets, JA/ATT can still be difficult to conduct due to the competing demands for limited airlift resources. These other destabilizing factors will be discussed in the next section.

Greater Demands

To more effectively apply airlift capability to more urgent transportation requirements, JCS PUB 15 categorizes movements into the following priorities: 76

Priority lAl--Supports Presidentially-directed missions and those in support of the White House

Priority Al2--Supports US forces in combat

Priority 1A3--Supports Presidentially-approved national priority missions

Priority 1A4--Supports special weapons missions

Priority lBl--Supports missions directed by Office of the Secretary of Defense or the JCS

Priority 1B2--Supports plans approved for implementation by the JCS

Priority 1B3--Supports minimal frequency channel missions

Priority 2Al--Supports US forces in a state of readiness for combat

Priority 2A2--Supports industrial production to prevent work stoppage of primary weapons

Priority 2Bl--Supports JCS-directed exercises

Priority 2B2--Supports readiness or evaluation tests requiring airlift

Priority 3A2--Supports US forces ready to deploy

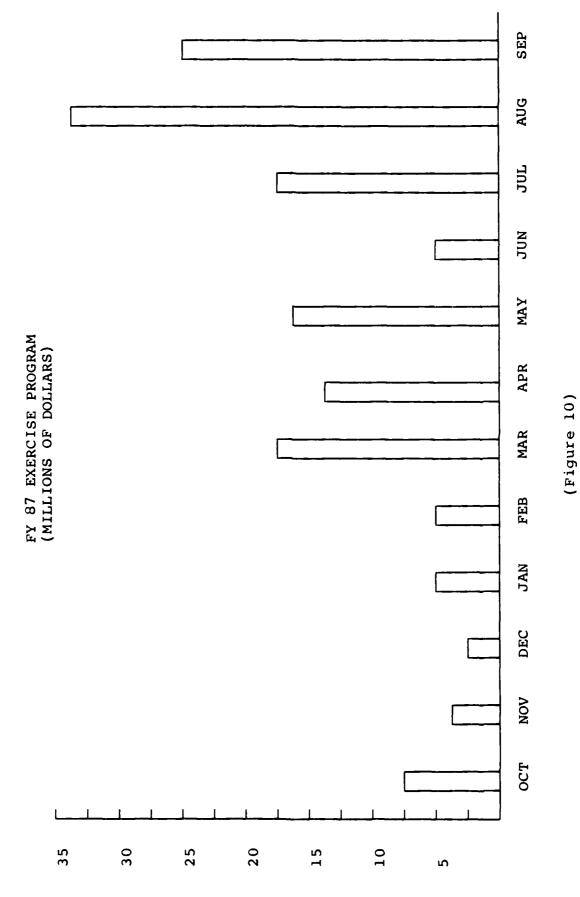
Priority 3A3--Supports channel missions

- Priority 3B1--Supports JA/ATT involving airborne operations
 Priority 3B2--Supports JA/ATT involving combat support
 training
- Priority 3B3--Supports JA/ATT for service schools requiring airborne, airdrop or air transportability training
- Priority 3B4--Supports JA/ATT involving new or modified equipment
- Priority 4Al--Supports US forces tasked for employment in support of war plans
- Priority 4A2--Supports static loading exercises for units
 tasked to perform air transportability
 missions
- Priority 4Bl--Supports other US forces or activities
- Priority 4B2--Supports other non-DOD activities that cannot be accommodated by commercial airlines

Priority 4B3--Supports static displays

Since JA/ATT has a lower movement priority than most MAC missions, it often fails to successfully compete for available aircraft capability when the MAC system is heavily tasked.

JA/ATT has historically been put at risk during the months of heavy exercise commitments. 77 Because of the



higher priority of exercise missions, airframes are simply not available to conduct JA/ATT when exercise airlift demand peaks. To help alleviate this situation, MAC, in conjunction with JCS, instituted a policy of fenced JA/ATT. This initiative was introduced by MAC in 1984 as a means to protect a certain level of JA/ATT flying hours which were vital to user training and currency programs. By fencing an established number of JA/ATT hours, stability was added to user training programs. As an adjunct to fenced JA/ATT, the JCS increased the PUB 15 priority of fenced hours to 2C1 or just below JCS exercises. Although both of these initiatives should enhance the management stability of the programs, JA/ATT missions will always be vulnerable to higher priority taskings.

Equitable Training

An issue which has plagued the JA/ATT program since its inception is the equitability of training accomplishment. The more commonly cited side of this problem deals with the amount of training service participants receive from the program. The less well known side of the equitable training issue, and probably the most important one, deals with the two core elements of JA/ATT, joint airborne training and air transportability training.

The former trouble area, interservice rivalry, has surfaced from time to time when MAC does not feel its receiving a fair share of the training on JA/ATT missions. Since the Air Force funds the program, it is not surprising that this issue becomes a topic whenever defense spending is down. The point system that was incorporated into Operation Order 1776 has done much to limit the arguments on which service is getting more out of JA/ATT. Even with the point system in place, additional criteria have been placed on eligibility for JA/ATT mission participation when flying budgets have been particularly restrictive. During the recent cut drills in 1988, nonproductive point to point missions were prohibited, static load training was severely restricted and transit times from airfields to drop zones were reduced. 79 All the services, particularly the Army and the Air Force, recognize the value of the JA/ATT program and will continue to work together to insure equitable training for all participants. Current "fair share" management practices are sound and will likely keep cries of foul to a minimum in the future.

The second part of the equitable training issue, airborne versus air transportability training, is multi-faceted. Airborne operations (parachute deployment of people or equipment) have enjoyed increased visibility by both the

Army and the Air Force as compared to airland operations. When weighed against the wartime spectrum of air transportation operations, such emphasis may not be warranted. In World War II, only 10 airborne operations were worthy of note: 80

Oran	1	Battalion Combat Team	November 1942
Sicily	1	Division Combat Team	July 1943
Salerno	2	Battalion Combat Teams	September 1943
Nadzab	1	Regiment Combat Team	September 1943
Noemfor	1	Battalion Combat Team	May 1944
Normandy	2	Divisions	June 1944
South France	1	Division	August 1944
Holland	3	Divisions	September 1944
Corregidor	1	Regiment Combat Team	February 1945
Rhine	2	Divisions	March 1945

My intention is not to argue the success or failure of these operations or the merits of airland versus airdrop delivery but merely to assert that the volume of airdrop operations was miniscule when compared to airland operations.

Should war breakout today, the situation would be very similar--airland operations would be of paramount importance. With a documented shortfall in airlift capability, proficiency in aircraft loading and offloading is manaatory.

Unfortunately, such training is the first to be reduced when budget constraints limit the JA/ATT program. This dilemma is exacerbated by the requirement to accomplish maximum training events per flying hour. Air transportability missions afford the pilot but one takeoff, approach and landing. Such a JA/ATT training scenario does not compete well against a tactical airdrop mission which may accomplish five or six events in an hour. The magnitude of the air transportability training problem is further exacerbated when one considers that approximately one-third of the cargo airlifted during a major contingency in Europe will be transported by an airplane from the Civil Reserve Air Fleet (CRAF). Load training on airline type equipment is nearly minimal.

CHAPTER VI

RECOMMENDATIONS

JA/ATT has undergone a number of positive management changes over the last several years despite severe fiscal pressures. While program quantity may have suffered, overall quality has improved. JA/ATT is not, however, without its critics. Some think the program should be abolished or incorporated into the JCS exercise program. Others believe it should be maintained but, at the same time, realize the program will experience additional change due to the forecast austerity of near term defense budgets. This chapter will analyze these varying viewpoints and recommend some no or low cost initiatives to further enhance JA/ATT type training.

Although doing away with the JA/ATT program may save a very small amount of management dollars, the alternative would be more costly. While the Army currently satisfies many of its basic airborne training requirements at no cost through JA/ATT, it would have to contract those same number of flying hours through the Airlift Services Industrial Fund at premium SAAM rates. MAC, on the other hand, would have to increase its unilateral flying training program to compensate for the 30 percent of C-130 and 10 percent of C-141

aircrew training requirements which are now accomplished on JA/ATT missions.81

The competition for training accomplishment by each of the services insures the quality of the program. If the JA/ATT dollars were taken away from the Air Force and given to the Army to merely satisfy organic airborne needs, real sm would be sacrificed for cost efficiency. Missions would depart the nearest available airfield and proceed directly to a drop zone instead of flying a combat-like scenario over a more extended route. Current trends in quality over quantity would be reversed.

The idea of incorporating JA/ATT into the JCS exercise program would likewise not be a prudent management decision. The exercise program has a finite budget with funds allocated to the various warfighting CINCs around the world. If JA/ATT had to compete in that environment, it would not have the advocacy of a major CINC like the large exercises do and would, consequently, not compete well. Maintaining JA/ATT in its present forum permits the primary user, the US Army, to freely interact with the primary operator, the Military Airlift Command. Moving the management function of JA/ATT into JCS would only add a layer of bureaucracy to a basically FORSCOM-MAC program.

The cyclical ups and downs of defense budgets which have hampered the continuity of the JA/ATT program will continue to be a fact of life. As was the case in the 1970 and 1988 reductions cited in the previous chapter, the services will have to cooperate to the maximum extent possible to maintain the viability of the program. More, however, can be done in the area of JA/ATT during major JCS exercises. Transported units' mobility skills would be better challenged if exercise deployment notification was either no notice or short notice. With exercise participation notification kept to a minimum, unit's would no longer have the luxury of months of predeployment planning. In addition, these deployments should take place without the benefit of Airlift Control Element expertise. These Air Force mobility professionals are few in number and will probably not be available in wartime. It is unfortunate that "success nets" are artificially built into exercise scenarios to guarantee mission objectives are met.

With unrestricted airspace becoming more of a premium everyday, exercises provide aircrews with an excellent opportunity to operate along unfamiliar tactical routes into strange drop zones. Ground commanders, however, are reluctant to participate in airground maneuvers during exercises. They feel aerial resupply will jeopardize their position and

hinder the progress of the ground effort. Due to exercise time constraints, ground units often deploy with enough supplies to sustain them through the period of the exercise. They do not need to be resupplied—again more exercise artificiality. More needs to be done in the exercise planning process to guarantee a predetermined level of tactical airlift play. Logistics in exercises is too often ignored. By inserting logistics realism into exercises, ground units would be forced to participate in JA/ATT type operations.

The air transportability initiatives taken during the 1988 funding crisis should be instituted into the JA/TT program on a permanent basis. Aircraft returning unit A from an exercise or training deployment could be used for a mobility test of unit B at the same location. No flying hours would be generated during this test of unit B; hence no additional dollars would be expended. Aircraft would be loaded on one side of the airfield then taxied to the other side—simulating flying time—then offloaded. Two units would receive valuable air transportability training at the cost of one deployment.

More can be done to enhance JA/ATT skills in the unilateral training arena. Building universal loading simulators at all the major ground forces bases would permit units to practise load planning and tiedown procedures with-

out the actual deployment of an airframe. Aircrews could likewise enhance their tactical airdrop skills by utilizing the training routes and drop zones of other wings. This is already done to a limited degree at Pope AFB to take advantage of the proximity to the 82nd Airborne Division. operations, however, usual entail the deployment of several airplanes and their crews away from home station. aircraft deployed dead heading several aircrews with it, the visiting aircrews could then fly host base aircraft over host wing tactical routes which are unfamiliar to them. maintain the workload at the participating bases, these "one aircraft--many aircrew" deployments could occur simultaneously. Pope AFB and Little Rock Air Force Base with its proximity to the Joint Readiness Training center at Ft. Chaffee, Arkansas provide an ideal environment for such an arrangement. These two locations are not unique as many other nearly colocated Army-Air Force organizations afford similarly promising opportunities for enhanced training.

CHAPTER VII

CONCLUSION

JA/ATT provides all the services with an opportunity to train in peacetime like we will fight in wartime. It is doubtful that the US Armed Force will be afforded the opportunity of having many months to hone their warfighting skills before being employed in a combat situation. Unlike our experience in World War II, we cannot wait until hostilities begin before we start to interact with one another. The JA/ATT program promotes that interaction now.

During periods of fiscal restraint, there is a temptation to trade quality training for quantity of training. Such pressures must be resisted because that quality represents realism. JA/ATT is such a quality program that provides advanced training for both aircrews and transported forces in a realistic environment. By practising the service developed procedures and techniques of aerial delivery in such an interservice environment, operational readiness is enhanced.

Combat mobility is not just MAC's responsibility; it is the job of deploying organizations as well. If supported forces do not maintain their own level of airlift readiness, the MAC system will quickly become over saturated during

periods of heavy activity. JA/ATT helps to ensure that system will operate efficiently throughout the spectrum of conflict.

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